TAXONOMY OF THE GENUS *ULOMA* DEJEAN (COLEOPTERA, TENEBRIONIDAE, ULOMINI) FROM YUNNAN, CHINA

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Abstract The paper deals with the beetle genus *Uloma* Dejean, 1821 and reports one new species *Uloma valgipes* sp. nov. from Yunnan Province of China. The new species is allied to *U. minuta* Liu, Ren & Wang, 2007, but differs in the following characteristics: inner edge of protibia extremely curved; pronotum of male without antero-median excavation; anterior margin of pronotum emarginate without bead in middle 1/3; metatarsomere I longer than IV; aedeagus with different shape. A key to 12 species of *Uloma* Dejean known from Yunnan is provided. The type specimen is deposited in the Museum of Hebei University.

Key words Tenebrionidae, Ulomini, Uloma, new species, China.

1 Introduction

The genus *Uloma* was established by Dejean (1821) for *U. culinaris* (L., 1758) from German, belonging to the family Tenebrionidae. It is an important group of arboreal darkling beetles and species of the genus are mainly distributed in moist and warm areas. Until now about 200 species of the genus are valid, from which 35 species were recorded in China. These were described respectively by Wiedemann (1821), Hope (1831), Fairmaire (1882), Kolbe (1886), Gebien (1914, 1927), Kaszab (1941a, 1941b, 1954, 1980), Nakane (1968), Masumoto (1982), Masumoto and Nisiiikawa (1986), Ren and Liu (2004), Liu and Ren (2007, 2008), and Liu *et al.* (2007).

During our study of the *Uloma* specimens in the Museum of Hebei University, we found a new species, *Uloma valgipes* sp. nov. from Yunnan, China. So far there are 13 species in Yunnan (including the new species described below), and about 36.1% are of Chinese species.

2 Material and Methods

We follow the terminology of morphological structures for the *Uloma* (Schawaller, 1996). The examined specimens are deposited in the Museum of Hebei University, Baoding (MHBU), the Institute of Zoology, Chinese Academy of Science, Beijing (IOZ) and the Institute of Entomology, SUN Yat-Sen University, Guangzhou (SYSU).

3 Uloma Dejean, 1821

Uloma Dejean, 1821; 67 (Type species; Tenebrio adinaris Linnaeus, 1758); Scidlitz, 1893; 593 - 597; Kaszab, 1982; 233 - 291; Masumoto et al., 1986; 17 - 43; Schawaller, 1996; 111 - 125; Schawaller, 2000; 1 - 23.

Melasia Perroud & Mulsant, 1856; 160 (Type species; Melasia gagatina Perroud & Mulsant, 1856). Synonymised by Jacquelin, 1861.

Prioscelida White, 1846; 11 (Type species; Prioscelida tenebrionoides White, 1846). Synonymised by Broun, 1880.

Key to the known species of Uloma Dejean from Yunnan.

The key is mostly based on males, so U. splendida Ren & Liu, 2004 could not be included herein.

- Antennae normal, without antennomeres prominent 7

 3. Clypeus with two small ridges in middle 4

 Clypeus flat, without ridges in middle 5

- 6. Antennae reaching basal 1/2 of pronotum, antennomere VII sharply prominent to inner edge; posternal process elevated one ridge at pointed apex
 - Antennae longer, reaching basal 1/3 of pronotum, antennomere III not prominent to inner edge; posternal process without ridges at pointed apex

 U. versicolor Ren & Liu, 2004
- 7. Antennae with several antennomeres sublinearly truncate and

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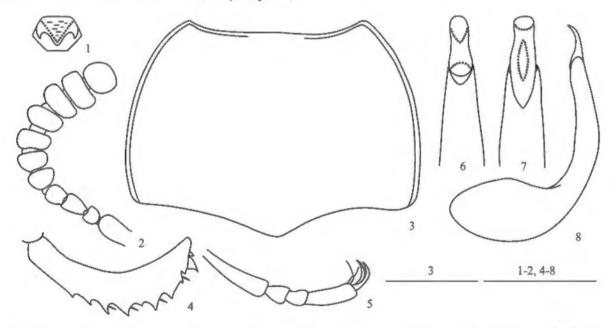
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longitudinally grooved at inner edges
U. liangi Ren & Liu, 2004
Antennae without antennomeres longitudinally grooved
8
8. Ligula with dense and short hairs
U. castanea Ren & Liu, 2004
Ligula without dense hairs 9
9. Pronotum with antero-median excavation 10
Pronotum without antero-median excavation 11
10. Mentum subcordate, strongly rising as leaf-roller form at
both sides, and depressed in middle with dense reticulate
microsculptures U. contortimargina Liu & Ren., 2007
Mentum completely flat and broad, not rising at both sides
U. hirticornis Kaszab, 1980
11. Maxillary palpus extremely expanded with securiform
terminal palpomere
U. gongshanica Ren & Liu, 2004
Maxillary palpus with subknife-shaped terminal palpomere
U. contracta Fairmaire, 1882

3.1 Uloma valgipes sp. nov. (Figs 1-9)

Male. Body elongate elliptical, with weak shine; dark brown, antennae, mouthparts and legs slightly paler. Head transverse; labrum transversely elliptical,

slightly produced and scattered with short hairs at front border; clypeus slightly linear at anterior border, and finely punctate; frontoclypeal suture indistinct; genae arcuately extended with small punctures, temples reduced; eyes transverse, with 2 - 3 facets at narrowest point in lateral view; frons slightly convex between eyes, with small punctures; mentum subhexagonal, with V-shaped convex in middle and fine transverse wrinkles, without pubescence; ligula deeply emarginate anteriorly, and depressed in middle with sparse and long hairs; maxillary palp with subknife-shaped terminal palpomere. Antennae reaching basal 1/3 of pronotum, antennomere III slender, V - X gradually widening, VII - X extremely transverse, nearly rectangular: XI nearly globose, ratio of the length (the width) of antennomeres II - XI as follows: 5.0 (5.0) : 8.0 (5.0): 7.0 (6.0): 7.0 (10.0): 6.0 (11.0): 6.0 (12.0) : 7.0 (14.0) : 6.0 (14.0) : 7.0 (14.0) : 10.0 (11.0).



Figs 1 – 8. *Uloma valgipes* sp. nov. 1 – 5. Male. 1. Mentum. 2. Antenna. 3. Pronotum. 4. Protibia. 5. Metatarsus. 6 – 7. Apical aedeagus. 8. Aedeagus. 1, 7. Ventral view. 2 – 6. Dorsal view. 8. Lateral view. Scale bars = 1 mm.

Pronotum about 1.4 times as wide as long, widest at basal 2/3, with punctures sparse in middle but becoming denser and smaller at sides; anterior margin emarginate with narrow bead only at both apices, without bead in middle 1/3; sides weakly arcuate, distinctly narrowing forward and feebly narrowing to base from widest point, with broad bead; basal margin distinctly prominent to rear in middle; anterior angles nearly rectangular, posterior angles obtuse. Scutellum triangular, with dense and small punctures. Elytra distinctly punctate-striate and with large punctures in

it, intervals flat, sparsely and finely punctate with several transverse wrinkles, lateral margins visible only at humeri in dorsal view. Propleuron with long wrinkles and large punctures. Posternum coarse, with dense punctures at sides but becoming sparser and smaller in middle, posternal process smoothly descending at pointed apex.

Protibia narrow at base, gradually widening to apex, and distinctly produced to inner apex; inner edge extremely curved; outer edge bearing eight small sharp teeth scattered with short hairs; dorsal surface with coarse and irregular punctures; ventral surface coarse with a row of five small teeth. Mesotibia coarse, finely dentate at outer edge. Metatibia smooth with few dentations at outer edge. Length ratio of metatarsomeres I – IV as follows: 26.0:8.0:8.0:18.0.

Aedeagus roundly arcuate at apex in dorsal view, with a longitudinal depression which wide in middle and narrow at apices in ventral view, and extremely curved in lateral view; parameres depressed at apex, broad at base, gradually converging to apex and parallel near apex.

Female. Unknown.

Measurements. Body length 7.0 mm; width 3.0 mm.

Material examined. Holotype &, Mt. Longxinhei (alt. 2 300 m), Longling (24.58° N, 98.7°E), Yunnan, 23 July 2008, collected by XU Ji-Shan (MHBU).

Distribution. China (Yunnan).



Fig. 9. Uloma valgipes sp. nov. 9. Habitus, male, dorsal view. Scale bar = 1 mm.

Diagnosis. The new species is similar to *U. minuta* Liu, Ren & Wang, 2007, but can be distinguished from the latter by the following characteristics: 1) inner edge of protibia extremely curved; 2) pronotum of male without antero-median excavation; 3) anterior margin of pronotum emarginate with narrow bead only at both apices, without bead in middle 1/3; 4) metatarsomere I longer than IV; 5) aedeagus with different shape.

Etymology. The specific name is derived from the Latin word "valgus" (not straight) and "pes" (foot), which refers to protibia extremely curved to inner border.

3. 2 Uloma compressa Liu & Ren, 2008

Uloma compressa Liu & Ren., 2008: 498 - 501.

Material examined. Holotype & , Jingpingliyue (alt. 1 630 m), Jingdong, Yunnan, 16 Nov. 2001, collected by TONG Zheng-Qiang (MHUB); 2 & & , 19, Manzhuang, Mengla, Yunnan, 2 Aug. 2004, collected by YUAN Cai-Xia and LI Jing (MHUB); 1 & , Banhong Town (alt. 1 130 m), Cangyuan, Yunnan, 16 July 2008, collected by XU Ji-Shan (MHUB); 1 &, Dabaitang, Xishui, Guizhou, 25 Sep. 2000, collected by REN Guo-Dong (MHUB); 2 & & Mujiao, Tongdao, Hunan, 26 July 2004, collected by WANG Ji-Liang (MHUB); 1 &, Mt. Daming, Guangxi, 21 May 2001, collected by ZHANG Qing (MHUB); 1 &, Neiwen, Pingdong, Taiwan, 27 May 2008, collected by CHEN Chang-Qing (MHUB); 2 & &, 3 \, \text{\$\gamma\$}, \text{Mt. Dinghu}, Zhaoqing, Guangdong, 3-5 Aug. 2010, collected by LIU Hao-Yu and ZHAO Xiao-Lin (MHUB); 2 & & , Mt. Nankun, Huizhou, Guangdong, 27 Aug. 2010, collected by LIU Hao-Yu (MHUB); 20 ♂ ♂ , 16 ♀ ♀ , Changning (alt. 310 m) , Sichuan , 9 July 2008, collected by SHI Ai-Min and LAI Guang (MHUB).

Distribution. China (Yunnan, Guizhou, Hunan, Guangxi, Taiwan, Guangdong, Sichuan).

Diagnosis and discription. See Liu and Ren (2008).

3.3 Uloma metogana Ren & Yin, 2004

Uloma metogana Ren & Yin, 2004: 69.

Material examined. Holotype &, Damu, Modog, Xizang, 17 Nov. 1998, collected by YAO Jian (MHUB); 7 ₺ ₺ , 3 ♀ ♀ , Wanglaoshan Forest Station, Lincang, Yunnan, 8-10 July 2009, collected by XU Ji-Shan and ZHANG Li-Xiang (MHUB); 6 & & , 12 ♀ ♀ , Mengma , Menglian , Yunnan , 14 -16 July 2009, collected by XU Ji-Shan and ZHANG Jian-Xiong (MHUB); 2 & &, Xima (alt. 1500 m), Yingjiang, Yunnan, 2 - 3 Aug. 2009, collected by MAO Ben-Yong (MHUB); 2 ♂ ♂ , 7 ♀ ♀ , Pianma, Lushui, Yunnan, 9 May 2004, collected by YANG Xiu-Juan and LIU Yu-Shuang (MHUB); 1 3, Qiaohou, Eryuan, Yunnan, 17 Aug. 2008, collected by XU Ji-Shan (MHUB); 1 &, Mt. Laifeng, Tengchong, Yunnan, 15 May 2004, collected by YANG Zi-Zhong (MHUB); 1 &, 2 9 9, Jiangjundong (alt. 2 200 m), Cangshan, Yunnan, 17 June 2008, collected by XU Ji-Shan (MHUB); 8 & d , 2 ♀ ♀ , Longxin Heishan (alt. 2 300 m), Longling, Yunnan, 23 - 25 July 2008, collected by XU Ji-Shan and GAO Zhen-Hua (MHUB); 1 ♀, Jiangcheng, Yunnan, 30 Aug. 2008, collected by CHEN Chang-Qing (MHUB); 2 ♀ ♀, Banhong

(alt. 1 130 m), Cangyuan, Yunnan, 16 July 2008, collected by XU Ji-Shan and GAO Zhen-Hua (MHUB); 1 9, Nanjian, Yunnan, 16 Aug. 2005, collected by LIU Hao-Yu (MHUB); 1 &, Modog (alt. 1 100 m), Xizang, 14 Aug. 2003, collected by REN Guo-Dong (MHUB); 3 9 9, Modog (alt. 1300 m), Xizang, 14 Aug. 2003, collected by REN Guo-Dong (MHUB); 1 ∂, 1 ♀, Ani-Beibeng (alt. 1 250 - 1 900 m), Modog, Xizang, 11 Aug. 2003, collected by REN Guo-Dong (MHUB); 2 & &. 1 º, Shayao, Chayu, Xizang, 24 - 26 June 1978, collected by LI Fa-Sheng (MHUB); 2 ♂ ♂ , 2 ♀ ♀ , Hongwei, Chayu, Xizang, 28 June 1978, collected by LI Fa-Sheng (MHUB); 1 &, 1 \, Xiachayu, Chayu, Xizang, 12 July 2005, collected by SHI Ai-Min (MHUB); 4 ₺ ₺, 3 ♀ ♀, Shangchayu, Chayu, Xizang, 14 July 2005, collected by SHI Ai-Min (MHUB); 1 δ , Defu (alt. 1 440 m), Napo, Guangxi, 6 Apr. 1998, collected by LI Tian-Shan (MHUB); 1 ♀, Huaping, Longsheng, Guangxi, 14 Oct. 2005, collected by WANG Ji-Liang (MHUB).

Distribution. China (Yunnan, Xizang, Guangxi).

Diagnosis and discription. See Ren and Yin (2004).

3.4 Uloma minuta Liu, Ren & Wang, 2007 Uloma minuta Liu, Ren & Wang, 2007; 70 – 75.

Material examined. Holotype &, Mt. Wuyi, Guadun, Fujian, 23 May 2004, collected by YUAN Cai-Xia and LI Jing (MHUB); 6 ₺ ₺ , 13 ♀ ♀ , Pianma, Lushui, Yunnan, 9 May 2004, collected by YANG Xiu-Juan and LIU Yu-Shuang (MHUB); I &, Mengma, Menglian, Yunnan, 14 July 2009, collected by XU Ji-Shan (MHUB); 1 &, 2 9 9, Banhong (alt. 1 130 m), Cangyuan, Yunnan, 16 July 2008, collected by XU Ji-Shan and GAO Zhen-Hua (MHUB); 1 9, Mt. Wuyi, Fujian, 5 July 2003, collected by BAI Ming (MHUB); 1 &, Beidou (alt. 550 m), Napo, Guangxi, 11 Apr. 1998, collected by WU Min (MHUB); 1 &, Ranjiang (alt. 882 m), Leye, Guangxi, 25 July 2004, collected by YU Yang (MHUB); 1 9, Yongshun, Hunan, 7 Aug. 2004, collected by WANG Jian-Feng (MHUB); 1 9, Dongzhai, Henan, 15 July 2005, collected by WANG Ji-Liang (MHUB); 2 & & , Jingangling, Yaoluoping, Yuexi, Anhui, 27 - 29 July 2007, collected by BA Yi-Bin (MHUB); 2 & &, South China Agricultural University, Guangzhou, Guangdong, 1 Aug. 2010, collected by LIU Hao-Yu (MHUB); 7 & &, 9 \, \, \, \, Changning (alt. 310 m), Sichuan, 9 July 2008, collected by SHI Ai-Min (MHUB).

Distribution. China (Yunnan, Fujian, Guangxi, Hunan, Henan, Anhui, Guangdong, Sichuan).

Diagnosis and discription. See Liu et al. (2007).

3.5 Uloma mulidenta Ren & Liu, 2004

Uloma mulidenta Ren & Liu, 2004; 296 - 297.

Material examined. Holotype &, Mt. Gaoligong (alt. 2540 m), Yunnan, 17 Apr. 2002, collected by LIANG Hong-Bin (MHUB); 2 & & Cikai town Pulahe, Gongshan (alt. 1510 m), Yunnan, 25 July 2002, collected by LIANG Hong-Bin (MHUB); 19, Shilicum T. Shaoka grassland, Jinping (alt. 1960 m), Yunnan, 16 Dec. 2003, collected by LIANG Hong-Bin (MHUB); 1 &, Dahaoping (alt. 2000 m), Tengchong, Yunnan, 3 May 2002, collected by SONG Jin-Xin (MHUB); 1 \, Heiwan, Jiangkou, Guizhou, 3 Aug. 2001, collected by REN Guo-Dong (MHUB); 2 & & , 1 \, Chaoyuanguan, Mt. Simian, Chongqing, 30 July 2003, collected by LIU Yu-Shuang and YUAN Cai-Xia (MHUB); 3 & & , 2 ♀ ♀ , Dawopu , Mt. Simian , Chongqing , 2 Aug. 2003, collected by LIU Yu-Shuang and YUAN Cai-Xia (MHUB).

Distribution. China (Yunnan, Guizhou, Chongqing).

Diagnosis and discription. See Ren and Liu (2004).

3. 6 Uloma versicolor Ren & Liu, 2004

Uloma versicolor Ren & Liu, 2004: 297 - 298.

Material examined. Holotype &, Mt. Gaoligong, Yunnan (alt. 2 540 m), 17 Apr. 2002, collected by LIANG Hong-Bin (MHUB); 8 & &, 7 ♀ ♀, Tacheng (alt. 2 012 m), Weixi, Yunnan, 7 Aug. 2008, collected by XU Ji-Shan and GAO Zhen-Hua (MHUB); 1 &, Qiaohou, Eryuan, Yunnan, 17 Aug. 2008, collected by XU Ji-Shan (MHUB); 1 &, Mt. Maer, Heqing, Yunnan, 22 June 2008, collected by XU Ji-Shan (MHUB); 1 ♀, Heiwan, Jiangkou, Guizhou, 3 Aug. 2001, collected by REN Guo-Dong (MHUB).

Distribution. China (Yunnan, Guizhou).

Diagnosis and discription. See Ren and Liu (2004).

3.7 Uloma liangi Ren & Liu, 2004

Uloma liangi Ren & Liu, 2004: 298 - 299.

Material examined. Holotype &, Mt. Gaoligong, Yunnan (alt. 2 540 m), 17 Apr. 2002, collected by LIANG Hong-Bin (MHUB); 2 & &, 2 ♀ ♀, GongdangshenShan, Bingzhongluo, Gongshan (alt. 2 540 m), Yunnan, 17 Apr. 2002, collected by LIANG Hong-Bin (MHUB); 1 &, 1 ♀, Danlonghe (alt. 2 250 m), Datang, Tengchong, Yunnan, 26 Apr. 2002, collected by OU Xiao-Hong (MHUB); 12 & &, 31 ♀ ♀, Laowo (alt. 1 500 m), Lushui, Yunnan, 26 July 2008, collected by XU Ji-Shan and GAO Zhen-Hua (MHUB); 4 ♀ ♀, Dasheyao forest station roadside, Bawan (alt. 2 320 m), BaoShan,

Yunnan, 16 Oct. 2003, collected by LIANG Hong-Bin (MHUB); 4 9 9, LongxinHeishan (alt. 2 300 m), Longling, Yunnan, 23 - 25 July 2008, collected by XU Ji-Shan and GAO Zhen-Hua (MHUB); 4 ₺ ₺ , 4 ♀ ♀ , Mt. Ailao , Jingdong , Yunnan, 7 Aug. 2009, collected by XU Ji-Shan and ZHANG Li-Xiang (MHUB); 1 9, Wanglaoshan Forest Station, Lincang, Yunnan, 8 July 2009, collected by XU Ji-Shan (MHUB); 19, Xinhua, Xinping, Yunnan, 29 July 2009, collected by XU Ji-Shan (MHUB); 28 \$ \$, 62 9 9, Junzishan, Shizong, Yunnan, 14 July 2006, collected by MAO Ben-Yong (MHUB); 3 ô ô , 6 ♀ ♀, Qiaohou, Eryuan, Yunnan, 17 Aug. 2008, collected by XU Ji-Shan (MHUB); 1 ♀, Mt. Leigong forest station, Guizhou, 14 Sep. 2005, collected by WANG Ji-Liang (MHUB); 3 & d, 2 ♀♀, Dashahe, Daozhen, Guizhou, 19 Aug. 2004, collected by YANG Xiu-Juan and HUA Hui-Ran (MHUB); 1 &, Mt. Fanjing, Jiangkou, Guizhou, 29 July 2001, collected by REN Guo-Dong (MHUB); 3 & &, 2 9 9, Kuankuoshui, Suiyang, Guizhou, 17 Aug. 2010, collected by NIU Yi-Ping and ZHOU Yong (MHUB); 3 ♀ ♀, Mt. Wuyi, Fujian, 21 May 2004, collected by YUAN Cai-Xia and LI Jing (MHUB); 2 & & , Dawopu, Jiangjin, Chongqing, 3 Aug. 2003, collected by YUAN Cai-Xia and LIU Yu-Shuang (MHUB); 3 ô ô, 2 9 9, Mt. Maan, Ganluo (alt. 2 300 – 2 320 m), Sichuan, 23 – 24 July 2008, collected by SHI Ai-Min (MHUB); 1 3, 19, Xiaoqiling, Yaoluoping, Yuexi, Anhui, 18 - 19 July 2007, collected by BA Yi-Bin (MHUB).

Distribution. China (Yunnan, Guizhou, Fujian, Chongqing, Anhui, Sichuan).

Diagnosis and discription. See Ren and Liu (2004).

3.8 Uloma castanea Ren & Liu, 2004

Uloma castanea Ren & Liu, 2004: 299 - 301.

Material examined. Holotype ð, Gaoligong, Yunnan (alt. 2 540 m), 17 Apr. 2002, collected by LIANG Hong-Bin (MHUB); 1 & , 1 \, 2, Bingzhongluo, Gongshan (alt. 1700 m), Yunnan, 26 Apr. 2002, collected by LIANG Hong-Bin (MHUB); 1 ♂, Cangshan (alt. 1 400 - 3 000 m), Dali, Yunnan, 10 June 1998, collected by MAO Ben-Yong (MHUB); 19 ₺ ₺, 10 ♀ ♀, Pianma, Lushui, Yunnan, 9 May 2004, collected by YANG Xiu-Juan and LIU Yu-Shuang (MHUB); 8 & & , 8 P P, Laowo (alt. 1 500 m), Lushui, Yunnan, 26 July 2008, collected by XU Ji-Shan and GAO Zhen-Hua (MHUB); 1 \$\delta\$, Shangchanghe, Wuliangshan Natural Reserve, Jingdong (alt. 2 200 m), Yunnan, 24 May 2001, collected by BU Wen-Jun (MHUB); 1 \, Danlonghe (alt. 2 250 m), Datang,

Tengchong, Yunnan, 26 Apr. 2002, collected by OU Xiao-Hong (MHUB); 13 ♂ ♂ , 12 ♀ ♀ , Weixi (alt. 2 175 m), Yunnan, 4 Aug. 2008, collected by XU Ji-Shan and GAO Zhen-Hua (MHUB); 1 ♀, Lajing (alt. 2 270 m), Lanping, Yunnan, 1 Aug. 2008, collected by XU Ji-Shan and ZHOU Yong (MHUB); 6 & & , 12 ♀ ♀ , Cangshanxi, Yangbi, Yunnan, 13 Oct. 2007, collected by XU Ji-Shan (MHUB); 9 & & , 11 \, \text{\$\text{\$Q\$}}, \, \text{Qiaohou}, \text{Eryuan}, \text{Yunnan}, \, 17 Aug. 2008, collected by XU Ji-Shan (MHUB); 1 8, 2 9 9, Mt. Wuyi, Taoyuanyu, Guadun, Fujian, 25 May 2004, collected by YUAN Cai-Xia and LI Jing (MHUB); 1 ?, Longcaoping, Guangxi, 27 Aug. 1986, collected by WANG Zheng-You (MHUB); 2 ♀ ♀, Mt. Fanjing, Jiangkou, Guizhou, 29 July 2001, collected by REN Guo-Dong (MHUB); 1 &, Heiwan, Jiangkou, Guizhou, 3 Aug. 2001, collected by REN Guo-Dong (MHUB); 1 9, Mt. Xitianmu (alt. 500 m), Zhejiang, 25 July 1998, collected by WU Hong (MHUB); 1 \, Yimen (alt. 2000 - 2200 m), Huili, Sichuan, 30 July 1974, collected by HAN Yan-Heng (MHUB): 3 & & . Muli (alt. 2 200 - 2 400 m), Sichuan, 29 July 2008, collected by XU Yong (MHUB); 1 ♀, Mt. Simian, Chaoyuanguan, Chongqing, 30 July 2003, collected by LIU Yu-Shuang (MHUB); 4 ♂ ♂ , 4 ♀ ♀ , Yaoluoping Management, Yuexi, Anhui, 17 July 2007, collected by BA Yi-Bin (MHUB); 5 & &, 599, Baotianman, Neixiang, Henan, 20 Aug. 2008, collected by REN Guo-Dong and WU Qi-Qi (MHUB); 1 &, 5 ♀ ♀, Huangshian, Xixia, Henan, 18 Aug. 2008, collected by REN Guo-Dong and WU Qi-Qi (MHUB).

Distribution. China (Yunnan, Fujian, Guangxi, Guizhou, Zhejiang, Sichuan, Chongqing, Anhui, Henan).

Diagnosis and discription. See Ren and Liu (2004).

3.9 Uloma contortimargina Liu & Ren, 2007

Uloma contortimargina Liu & Ren., 2007: 530 - 538.

Material examined. Holotype &, Mt. Pinglong (alt. 350 – 500 m), Shangsi, Guangxi, 6 Apr. 2002, collected by SHI Ai-Min (MHUB); 1 &, 1 &, Banpo, Luchun, Yunnan, 24 July 2009, collected by XU Ji-Shan and ZHANG Li-Xiang (MHUB); 2 & &, 4 & &, Mt. Pinglong (alt. 350 – 500 m), Shangsi, Guangxi, 6 Apr. 2002, collected by SHI Ai-Min (MHUB); 1 &, Fulong (alt. 200 m), Fangcheng, Guangxi, 23 May 1999, collected by LI Wen-Zhu (IOZ); 1 &, Maolan, Libo, Guizhou, 17 Aug. 2010, collected by NIU Yi-Ping (MHUB); 1 &, Yuanerping, Yuanling, Hunan, 3 Aug. 2004, collected by WANG Ji-Liang (MHUB).

Distribution. China (Yunnan, Guangxi,

Guizhou, Hunan).

Diagnosis and discription. See Liu and Ren (2007).

3. 10 Uloma hirticornis Kaszab, 1980

Uloma hirticornis Kaszab, 1980: 169 - 221.

Material examined. 1 & , 1 9 , Wangtianshu, Mengla, Yunnan, 6 Aug. 2007, collected by REN Guo-Dong and HOU Wen-Jun (MHUB).

Distribution. China (Yunnan); Vietnam. Diagnosis and discription. See Kaszab (1980).

3. 11 Uloma gongshanica Ren & Liu, 2004

Uloma gongshanica Ren & Liu, 2004: 300 - 301.

Material examined. Holotype Gaoligong, Yunnan (alt. 2 540 m), 17 Apr. 2002, collected by LIANG Hong-Bin (MHUB); 2 & &, Pianma, Lushui, Yunnan, 9 May 2004, collected by YANG Xiu-Juan and LIU Yu-Shuang (MHUB); 1 &, Ruili, Yunnan, 17 May 2004, collected by YANG Xiu-Juan (MHUB); 2 8 8, 4 9 9, Yingjiang (alt. 1 790 - 2 350 m), Yunnan, 20 June 1995, collected by XU Zheng-Hui (MHUB); 1 9, Banglazhang (alt. 1 280 m), Longling, Yunnan, 17 Apr. 2002, collected by YI Chuan-Hui (MHUB); 19, Xingshan, Hubei, 7 Aug. 1982, collected by MAO Xiao-Yuan (MHUB); 2 9 9, Mt. Mogan, Zhejiang, 17 June 2004, collected by LIANG Hong-Bin (MHUB); 1 9, Kuankuoshui, Suiyang, Guizhou, 17 Aug. 2010, collected by NIU Yi-Ping (MHUB); 1 ô, Kending Park, Taiwan, 7 Oct. 2008, collected by CHEN Chang-Qing (MHUB).

Distribution. China (Yunnan, Hubei, Zhejiang, Guizhou, Fujian, Taiwan).

Diagnosis and discription. See Ren and Liu (2004).

3. 12 Uloma contracta Fairmaire, 1882

Uloma contracta Fairmaire, 1882: 226 - 227.

Material examined. 1 \(\text{?} \), Hehua, Tengchong, Yunnan, 13 May 2004, collected by YANG Xiu-Juan (MHUB); 1 \(\delta \), Tianchi, Jianfengling, Hainan, 1 July 1981, collected by OU Yang (SYSU); 1 \(\text{?} \), Jianfengling, Hainan, 22 Oct. 1983, collected by WU Shao-Hua (SYSU); 1 \(\delta \), Defu (alt. 1 350 m), Napo, Guangxi, 18 June 2000, collected by ZHU Chao-Dong (MHUB); 1 \(\text{?} \), Defu (alt. 1 350 m), Napo, Guangxi, 19 June 2000, collected by CHEN Jun (IOZ); 1 \(\delta \), Beidou (alt. 550 m), Napo, Guangxi, 10 Apr. 1998, collected by LI Wen-Zhu (IOZ); 1 \(\delta \), Fulong (alt. 200 m), Fangcheng, Guangxi, 23 May 1999, collected by ZHANG Yan-Zhou (IOZ).

Distribution. China (Yunnan, Hainan, Guangxi); Indonesia.

Diagnosis and discription. See Fairmaire (1882).

3. 13 Uloma splendida Ren & Liu, 2004

Uloma splendida Ren & Liu, 2004: 301 - 302.

Material examined. Holotype 9, Mt. Gaoligong, Yunnan (alt. 2540 m), 17 Apr. 2002, collected by LIANG Hong-Bin (MHUB); 299, Mt. Gongdangshen (alt. 2540 m), Bingzhongluo, Gongshan, Yunnan, 17 Apr. 2002, collected by LIANG Hong-Bin (MHUB); 19, Heiwan, Jiangkou, Guizhou, 3 Aug. 2001, collected by REN Guo-Dong (MHUB); 19, Mt. Fanjing, Jiangkou, Guizhou, 29 July 2001, collected by REN Guo-Dong (MHUB).

Distribution. China (Yunnan, Guizhou).

Diagnosis and discription. See Ren and Liu (2004).

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中国云南齿甲属分类研究(鞘翅目,拟步甲科,齿甲族)

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摘 要 对中国云南省的齿甲属 Uloma Dejean 进行了分类整 理,描述1新种 Uloma valgipes sp. nov.并绘图,新种与小齿甲 U. minuta Liu, Ren & Wang, 2007 相似, 但可以通过以下特征 区别于后者: 前足胫节向内侧极弯; 雄性前胸背板无凹; 前胸 背板前缘近两侧具细饰边,中部 1/3 范围内无饰边;后足第1 跗节长于第4节;雄性外生殖器形状不同。并给出了云南省 已知种类检索表。模式标本保存于河北大学博物馆。

关键词 鞘翅目,拟步甲科,齿甲属,新种,中国,云南.

正模 & , 云南龙陵龙新黑山 (海拔 2 300 m), 2008-07-23,徐吉山采。

词源: 新种种名源自拉丁词 valgus (弯的) +拉丁词 pes (足) 变化词尾组合而成, 意指该虫的雄性前足胫节向内侧 极弯曲。

中图分类号 Q969.498.2

弯胫齿甲, 新种 Uloma valgipes sp. nov. (图 1~9)

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